INSTALLATION AND OPERATING INSTRUCTIONS

ALPINE®
GAS FIREPLACES

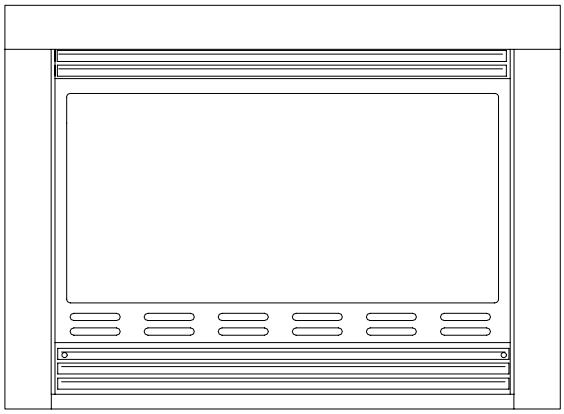
STi Series
HEAT RECIRCULATING GAS FIREPLACE

MODEL : STi – NG Natural Gas
STi – LP Propane

These gas appliances have been tested in accordance with National Safety Standards, and have been certified by Warnock Hersey for installation & operation as described in these Installation and Operating Instructions in the United States.

Check with your local building code agency before you begin your installation to ensure compliance with local codes, including the need for "permits" and follow-up inspections. If any problems are encountered regarding code approvals, or if you need clarification of any of the instructions contained here, contact:

ALPINE GAS FIREPLACES
#801-768-8411 / www.alpinefireplaces. com



WARNING: If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage , personal injury or loss of life. Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life.	**WHAT TO DO IF YOU SMELL GAS:** • **Do not try to light any appliance.** • **Do not touch any electrical switch; do not use any phone in your building.** • **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions** • **If you cannot reach your gas supplier, call the fire department.**
FOR YOUR SAFETY **Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**	**INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.**

INSTALLER: **PLEASE LEAVE THIS MANUAL WITH THE CUSTOMER**

HOMEOWNER: **PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE**

Alpine Gas Fireplaces
782 West State Street
Lehi, Utah 84043

Tested by: ITS Warnock Hersey

7/00

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IMPORTANT: SAVE THESE INSTRUCTIONS

The STi Series Direct Vent Fireplace must be installed in accordance with these instructions. Carefully read all the instructions in this manual first. Consult the "authority having jurisdiction" to determine the need for a permit prior to starting the installation. It is the responsibility of the installer to ensure this fireplace is installed in compliance with the manufacturer's instructions and all applicable codes.

This insert is intended to be installed by professional installers that understand the principles of proper gas installation techniques, venting principles, and safety clearances. This manual is written with an assumption that certain basic knowledge of this product exists with the installer. The installation of this appliance should not be attempted by anyone not familiar with these basic principles.

DO NOT REMOVE THIS LA-

Serial Number: STi-

Listed: DIRECT VENT GAS FIREPLACE HEATER
Tested to: ANSI Z21.88 1998
Report No. 476-1808-00 (July 2000)

Warnock Hersey

Alpine Gas Fireplaces
Lehi, Utah

NATURAL GAS : Series STi-NG
Model: □ STi-270 □STi-310 □STi-360

	STi- 270	STi-310	STi-360
Orifice Size (DMS)	36	33	31
Minimum Input	18,000	21,000	22,000
Maximum Input	30,000	34,000	38,000
Altitude	2500-6500ft.		ASL
Minimum supply pressure		5”	WC
Manifold pressure high		3.5”	WC
Manifold pressure low		1.2”	WC

PROPANE : Series STi-LP
Model: □ STi-270 □STi-310 □STi-360

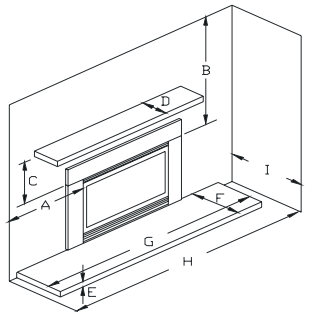
	STi- 270	STi-310	STi-360
Orifice Size (DMS)	53	52	51
Minimum Input	21,000	24,000	26,000
Maximum Input	30,000	34,000	38,000
Altitude	2500-6500ft.		ASL
Minimum supply pressure		11”	WC
Manifold pressure high		10”	WC
Manifold pressure low		6”	WC

Field Converted
Put Label Here

VENTING: Use Only Simpson Dura-Vent Termination Components. Use only Simpson vent cap #9080 on all applications. This appliance must be installed in accordance with the manufacturer’s installation instructions and with local codes, if any; if not, follow the current ANSI Z223.1 in the USA. Electrical supply 120VAC, .50 Amps, 60Hz. **NOT FOR USE WITH SOLID FUEL. This vented gas fireplace is not to be used with air filters.**

Clearances to Combustibles Unless Specified

Side Wall from glass frame	A	10”
Ceiling from top of louver	B	48”
Min. Mantel Clearance	C	13”
Mantel Depth 1/2”	D	3
Mantel Clearance	C	18”
Max. Mantel Depth	D	12”
Hearth Height	E	0”
Hearth Depth	F	16”



BEFORE YOU START

NOTE TO BUILDING CODE OFFICIALS: The principles of installation outlined in this manual are representative of the majority of installations that are encountered. There are several variations to these instructions that could be acceptable. If a variance to these instructions is encountered, we recommend that you contact the manufacturer directly to verify these variations.

Safe installation and operation of this appliance requires common sense, however, we are required by ANSI Standards to make you aware of the following:

INSTALLATION AND REPAIR SHOULD BE DONE BY A QUALIFIED SERVICE PERSON. THE APPLIANCE SHOULD BE INSPECTED BEFORE USE AND AT LEAST ANNUALLY BY A PROFESSIONAL SERVICE PERSON. MORE FREQUENT CLEANING MAY BE REQUIRED DUE TO EXCESSIVE LINT FROM CARPETING, BEDDING MATERIAL, ETC, IT IS IMPERATIVE THAT CONTROL COMPARTMENTS, BURNERS AND CIRCULATING AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.
DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.
WARNING: FAILURE TO INSTALL THIS APPLIANCE CORRECTLY WILL VOID YOUR WARRANTY AND MAY CAUSE A SERIOUS HOUSE FIRE.
CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURES, ESPECIALLY THE FIREPLACE GLASS, AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.
YOUNG CHILDREN SHOULD BE CAREFULLY SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.
CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.

GENERAL SAFETY INFORMATION

1) The appliance installation must conform with local codes or, in the absence of local codes, with the current *National Fuel Gas Code*, ANSI Z223.1 installation code.
2) The appliance when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes with the current *National Electrical Code,* ANSI/NFPA 70.
3) This appliance must be connected to the specified vent and termination cap to the outside of the building envelope. Never vent to another room or inside a building. Make sure that the vent is fitted as per venting instructions.
4) Inspect the venting system annually for blockage and any signs of deterioration.
5) Any safety glass removed for servicing must be replaced prior to operating the appliance.
6) To prevent injury, do not allow anyone who is unfamiliar with the operation to use the fireplace.
7) Wear gloves and safety glasses for protection while doing required maintenance.
8) Be aware of electrical wiring in locations in walls and ceilings when cutting holes for termination.
9) Under no circumstances should this appliance be modified. Parts that have been removed for servicing should be replaced prior to operating this appliance.
10) Installation and any repairs to this appliance should be done by a qualified service person. A professional service person should be called to inspect this appliance annually. Make it a practice to have all of your gas appliances checked annually.
11) Under no circumstances should any solid fuels (wood, paper, cardboard, coal etc.) be used in this appliance.
12) The appliance area must be kept clear and free of combustible materials, gasoline and other flammable vapors and liquids.
13) If the pilot goes out for any reason, turn the control knob to the off position. Wait five minutes before attempting to re-light pilot.
14) Never obstruct the flow of ventilation and combustion air to the fireplace. Always be sure the vent termination and air inlets remain clear and open.

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system when test pressures are in excess of 1/2 psig. The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system when test pressures are equal to or less than 1/2 psig.

SYSTEM SPECIFICATIONS (2500 to 6500 feet altitude)

Burner Inlet Orifice Sizes:	**NG**	**LP**
STi – 270	#36	#53
STi – 310	#33	#52
STi – 360	#31	#51
Max. Input Rating –		
STi – 270	30,000	30,000
STi – 310	34,000	34,000
STi – 360	38,000	38,000
Min. Input Rating –		
STi – 270	18,000	21,000
STi – 310	21,000	24,000
STi – 360	22,000	26,000

Note: Output Capacity is a thermal efficiency rating determined under continuous operating conditions and was determined independently of any installed system. Vent height may or may not change your efficiency ratings.

Min. Supply Pressure	**Natural Gas**	**5.0" w.c.**
	Propane	**11.0" w.c.**
Max. Supply Pressure	**Natural Gas**	**7.0" w.c.**
	Propane	**13.0" w.c.**

Manifold Pressure
Natural Gas 3.5" +/-0.2" w.c.
Propane 10" +/-0.2" w.c.

Minimum Gas Line Pipe Size: 1/2"

Electrical 120 VAC System
Amperage Rating: 0.50 Amps
Variable Speed Fan: Variable Speed 160 CFM

Because masonry chimneys may crack due to settling, chimney fires, water damage, etc. A thorough inspection for this type of damage is strongly encouraged. Any substantial damage must be repaired previous to installation. The flue liners provided should be adequate if damage is minor.

PREPARING EXISTING FIREPLACE FOR INSERT INSTALLATION

Thoroughly review the needed clearances on page 16 of this manual before proceeding.

1) When preparing an existing fireplace for an Alpine insert, ensure that the clearances in this manual are strictly adhered to.
2) Measure fireplace opening to ensure the purchased product will fit.
3) Check fireplace dimensions on the installation site before proceeding with installation. This will ensure proper clearances and assist in identifying potential problems before installation.

MINIMUM FIREPLACE OPENING

Model	**Width**	**Height**	**Depth**
STi-270	27.5"	20.5"	16.75"
STi-310	31.5"	23 "	16.75"
STi-360	36.5"	25"	16.75"

4) Review the vent termination requirements before proceeding with installation.
5) Ensure that the body of the appliance will fit into the existing fireplace opening and that the existing chimney can accommodate the two 3" liners necessary for this insert.
6) To determine if the two chimney liners will fit through the existing damper, the damper must be either bolted or clamped open. If the liners will not fit through the damper, or has excessive bends, it must be removed.
7) Plan gas piping and routing (see "Routing Gas Piping to Fireplace" on page 6).

PREPARING THE INSERT

Removing the Glass

The decorative glass trim must be removed before insert installation.

1) To remove the glass, remove the two trim hooks inside the valve chamber. (see figure 1)
2) Pull the bottom of the Trim forward about 4 inches.
3) Lift the trim up about ½ inch.
4) The trim should now be free and able to move away from the appliance.
5) Take care to hold the glass in place, rapid movements or rough handling will allow he glass to fall out of the trim.
6) Set the trim aside so that it will not get damaged during the installation process.

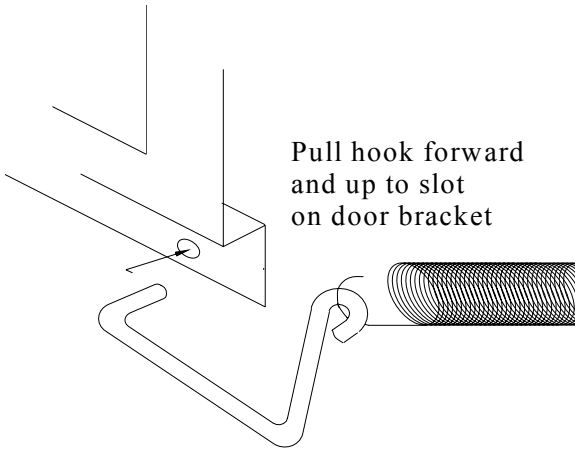


Fig. 1– Removing the Trim Hooks

Note: Be sure not to damage the gasket on the glass.

Removing the Appliance Adapter

The appliance may have been shipped with the Appliance Adapter installed. Gently remove the adapter by sliding it to the rear of the appliance. (See figure 2). Take great care not to damage the white adapter gasket. If the Gasket is damaged, do not install the appliance until the gasket is replaced.

Note: Take special care not to damage the gasket on the appliance adapter.

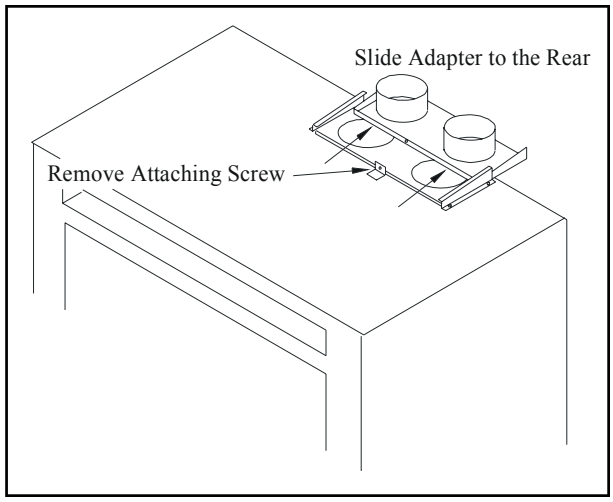


Figure 2 - Removing the Appliance Adapter

Preparing the Leveling Bolts

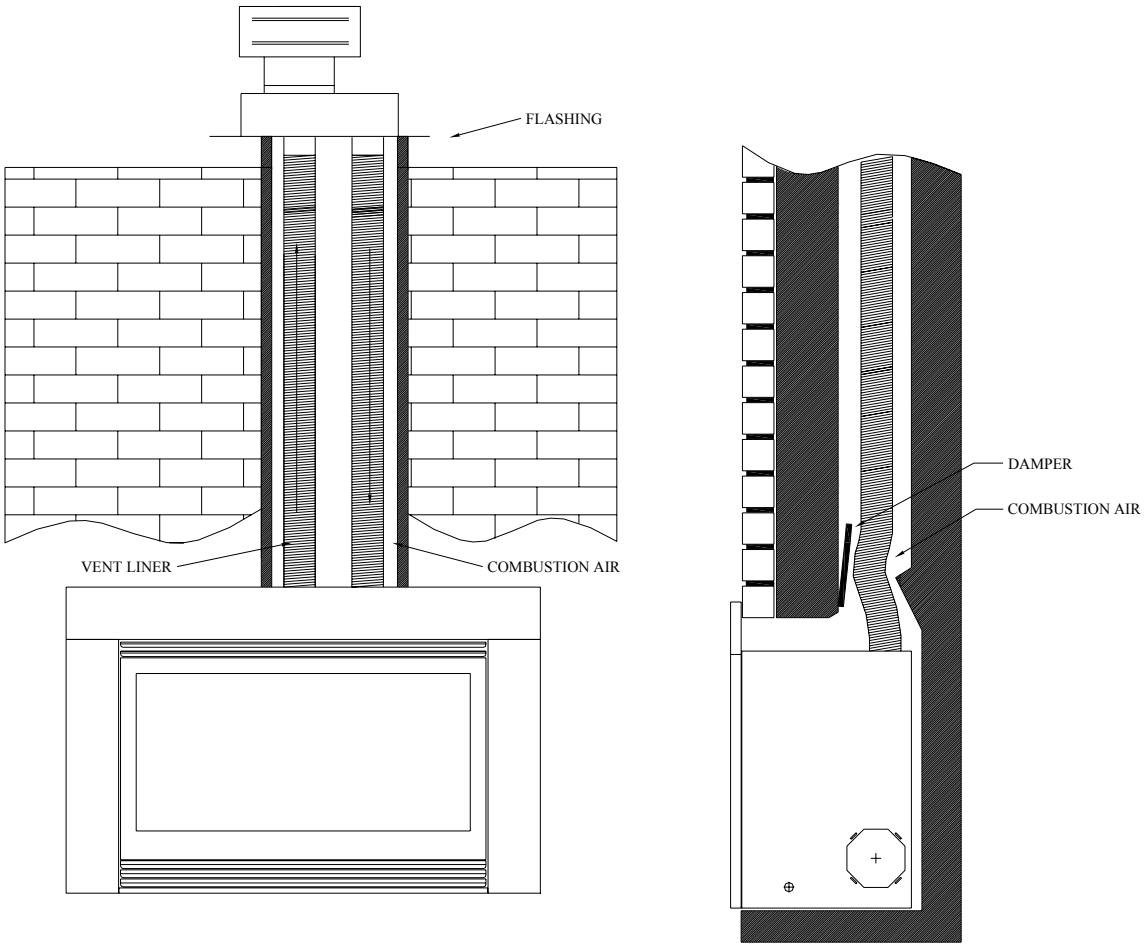
The insert is equipped with two rear leveling bolts to enable the fireplace to be easily leveled. These leveling bolts need to be fully retracted prior to inserting the appliance into the opening. This is done to prevent damage to the existing fireplace hearth. Once the appliance is located inside the fireplace enclosure. The bolts may then be extended to level the fireplace.

ROUTING GAS PIPING TO FIREPLACE

The STi fireplace insert provides a gas piping inlet hole on the front left side of the appliance. Gas piping must be routed to this location prior to installing the insert.

Determine where the fireplace will be positioned when the installation is complete. Once this position is determined, gas line positioning can also be determined.

Note: Improper installation of gas piping is potentially dangerous. All gas piping should be installed by qualified individuals and strict adherence to applicable codes is required. If you are not familiar with gas piping or your local codes, do not attempt to install the gas piping.


FLASHING
VENT LINER
COMBUSTION AIR
DAMPER
COMBUSTION AIR

INSTALLING CHIMNEY LINERS

Review page 7 to become familiar with the fireplace as a system.

NOTE: Never connect this gas appliance to a chimney or flue serving a separate solid-fuel burning appliance.

The maximum vertical length of the venting system is 30'. The minimum vertical length of the venting system is 8'. Horizontal termination of the vent is not approved.

Two 3" chimney liners (#09400) are used with Alpine STi series inserts. One liner will supply the combustion air to the fireplace, the other will vent the flue gases. Also required are:

- an appliance adapter which enables the liners to be fastened to the insert (#29700)
- a co-linear adapter which enables the liners to be joined with the termination cap (#09318)
- flashing to seal the flue tile
- a termination cap (#09317)
- two band clamps to fasten the liners to the appliance adapter (#08530)

Installation Procedure

NOTE: Be sure to identify each liner in the fireplace so you can make proper connections. If the insert is vented improperly, it will not function and may create a dangerous situation.

1) Measure the distance from the top of the flue tile to the approximate top of the insert.
2) Add about 6" to your measurement and carefully stretch each liner to that length.
3) Cut and bend the flashing to form a box type cap to fit over the flue tile (the oval lip on the flashing must be facing up).

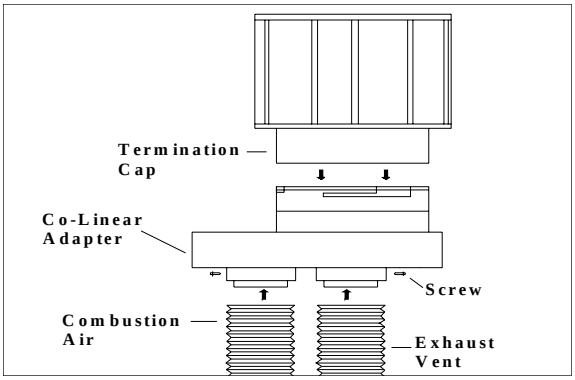


Figure 3 -Connecting the Co-linear Adapter

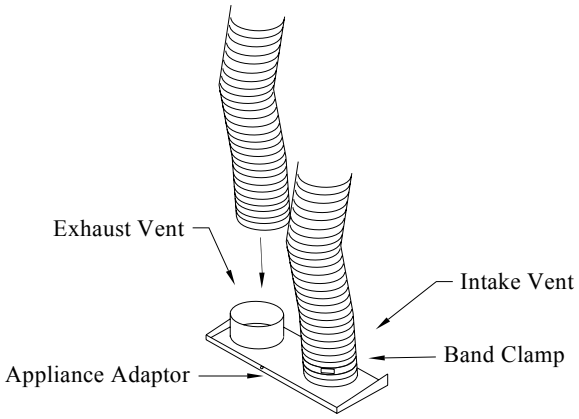


Figure 4 - Attaching Liners to Appliance Adaptor

4) Take the flashing and seal it to the flue tile with some high quality sealant (remember the oval lip on the flashing must be facing up to deter water).
5) Lower all but one foot of the vent liner through the flashing into the flue tile.
6) Attach the liner to the co-linear adapter (see fig. 3).
7) Push the liner onto the nipple that flows through the adapter until it seats against the gasket material.
8) Fasten the liner to the adapter with 3-4 sheet metal screws.
9) Lower the liner for combustion air and fasten it to the co-linear adapter, in the same manner as the vent liner, to the remaining nipple.
10) Lower the adapter onto the flashing and fasten with sheet metal screws through the tabs provided. Seal these screws with a high quality sealant to prevent leaking. Seal around the adapter to flashing joint.
11) Line up the lugs on the termination cap with the receivers on the adapter and seat and then twist the cap on.
12) Fasten the cap to the adapter with sheet metal screws for added strength.
13) Slide the Exhaust Vent liner over the left outlet on the appliance adapter. (See figure 4) Secure the liner with one 3" band clamp.
14) Attach the Combustion Air liner to the remaining nipple on the appliance adapter. Secure the liner with one 3" band clamp.
15) Place the appliance adapter in its approximate final position and, if needed, adjust the liners until no severe bends or kinks exist. Be careful not to tear or dent the liners or pull off one of the connections. If a liner is punctured or torn, it must be replaced.

Note: Take special care not to damage the gasket material on the appliance adapter. An improper seal will inhibit proper operation of the fireplace insert.

WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

POSITIONING THE INSERT

Gently place the insert on the hearth and route the blower wires to the back of the insert through the blower adapter hole. Gently slide the insert into position. Use the leveling bolts provided to adjust the height and the level of the insert. **Final leveling is not required at this point.** The adapter must be attached to the appliance while it is being positioned. Make sure the adapter is properly attached and secured before proceeding. See Fig. 5.

Note: Be sure to protect the hearth with cardboard, thin plywood, or light sheet metal to prevent the inset from marring , or scratching the hearth.

Note: The bottom trim panel will need to be installed to adjust the height. See "Trim Panel Installation".

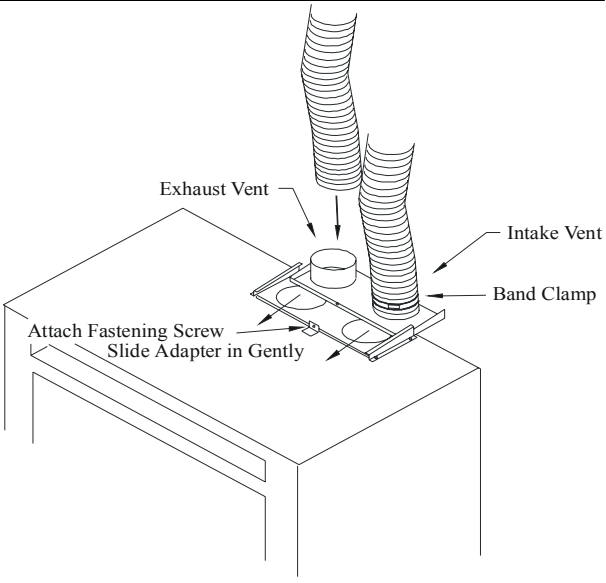


Figure 5- Connecting the Appliance Adapter

ELECTRICAL CONNECTIONS

The simplest and most effective way to get power to the system is to run a 120V A.C. line to the right side of the fireplace. The 120V A.C. power runs through the fan control switch, the thermostatic on/off switch, and also the blower motor itself. These switches are connected in series or end to end.

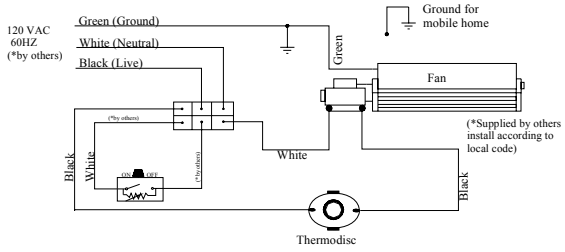


Figure 6 - Wiring Diagram

GROUNDING

NOTE: Star Washer must be placed between base material and closed loop connector.

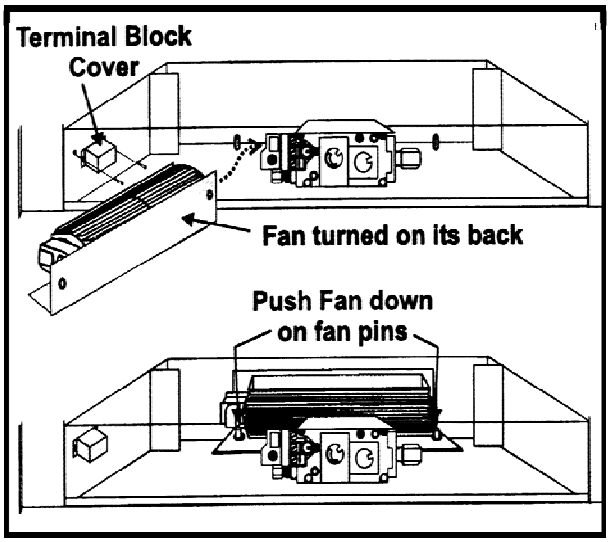


Figure 7 - Inserting the Fan

NOTE: The appliance and its individual shut off valve must be disconnected from the gas supply piping system during any pressure testing of that system in excess of 1/2 psig.
The appliance must be isolated from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the gas supply piping system when test pressures are equal to or less than 1/2 psig.

GAS CONNECTIONS

1) Install the final gas nipple into the fireplace insert (the nipple should only extend about 3" past the interior wall of the fireplace insert).
2) Connect the appliance gas shut off valve and proceed to check for leaks **(consult local building officials for the accepted test procedure in your area)**.
3) After testing the system for leaks, install the connect the flexible appliance adapter to the gas line.
4) Turn the gas supply on to the fireplace and test again for gas leaks.

LOG INSTALLATION

Gently remove the logs from their packaging.

Place the two largest logs on the locating pins on the burner (the bigger of the two placed in the front and the smaller placed to the rear). The face of the back log should be even with the back of the burner, centered, and then gently pushed down onto the locating pin. The face of the front log should be behind the front of the burner approximately 1/2 of an inch and centered.

The number of top logs will vary depending on the size of the insert (see fig. 8A & 8B). The 360 and 310 models have three top logs while the 270 model has two top logs. The top logs should be placed on the cut out pads located on the top surface of the two largest logs. They must be located in these positions to avoid combustion related problems.

Note: A flame hitting directly on the bottom of a log will burn dirty and cause excessive soot build up on the log and inside the firebox.

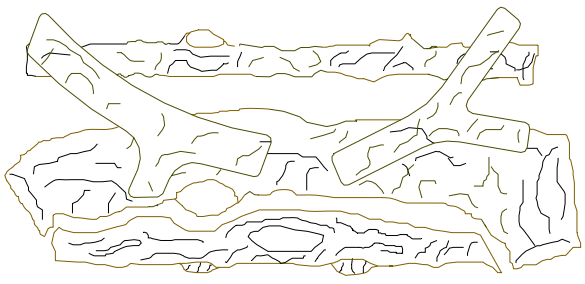


Figure 8A - Log Installation (270 Model)

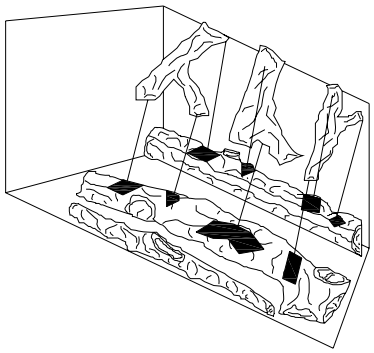


Fig. 8B - Log Installation (310 & 360 Models)

UNIT TESTING AND ADJUSTMENTS
AERATION ADJUSTMENT

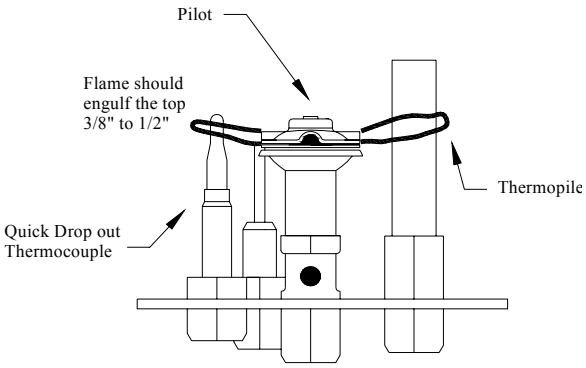


Fig. 9A– Pilot Flame Characteristics

Pilot Light Adjustment

The pilot light is preset at the factory and should require no adjustment. The flame on the pilot should project about 5/8" past the pilot head, with enough flame to impinge on both the thermocouple on the left side and the thermopile on the right side of the pilot head. If the pilot is erratic, noisy, or yellow, call your Alpine Fireplaces Dealer or another qualified service technician to make the adjustment.

(Refer to figure 9A)

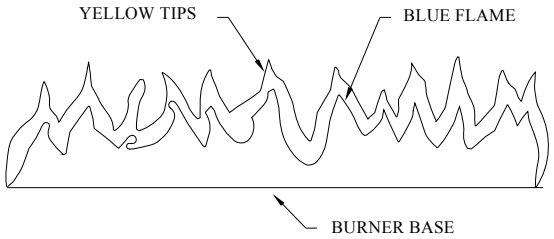


Figure 9B- Proper Flame Characteristics

PRIMARY AIR ADJUSTMENTS

The flame should have a blue base with yellow tips (See fig. 9B). A dark orange flame with sooting and black smoke indicates a lack of primary air. The primary air shutter is located in the firebox on the right hand side of the burner. Adjust the primary mixture by loosening the set screw on the air shutter and increasing the opening for more air and a bluer, cleaner flame, or by closing the air shutter for a more yellow flame. See figure 10.

The primary air adjustment is preset at the factory. Little or no adjustment may be required for natural gas. Propane will perform very differently at different altitudes and from different fuel suppliers. Some adjustment will most likely be needed for an appliance burning propane.

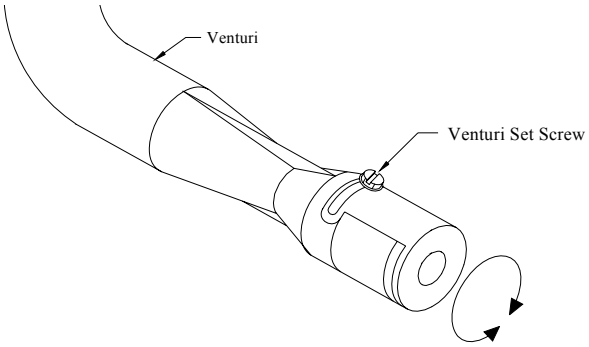


Figure 10- Adjusting the Primary Air Mixer

DERATING THE BURNER

The fireplace has been designed to operate at elevations approximately 4500 ft. above sea level. No deration of the burner needs to occur unless the fireplace is installed at elevations below 2500 ft. or above 6500 ft. The burner orifice should then be adjusted one drill size smaller for higher elevations and one drill size larger for lower elevations.

TRIM AND DOOR INSTALLATION

Attach all trim panels before snugly tightening all of the screws. This will provide you with the ability to make all joints uniform.

1. Attach the bottom trim piece with the screws provided.
2. Attach the top trim panel
3. Attach the left and right side panels
4. Line up the outside edge of the right side piece with the edge of the top piece. Line up the right side piece with the bottom piece. Secure the right side piece.
5. Repeat step #4 on the left side.
6. With all pieces lined up and even, secure all screws.
7. See Figure 16 for an exploded view of the face pieces and their proper locations .
8. With the screws tightened, test fit the glass panel to make sure it will fit within the opening. Adjust the panels if needed.
9. The top louver set may now be attached with four bullet catches, two on each end.
10. The bottom louver set comes with the hinges attached. Attach the hinges to the appliance and test the louver set for proper function.

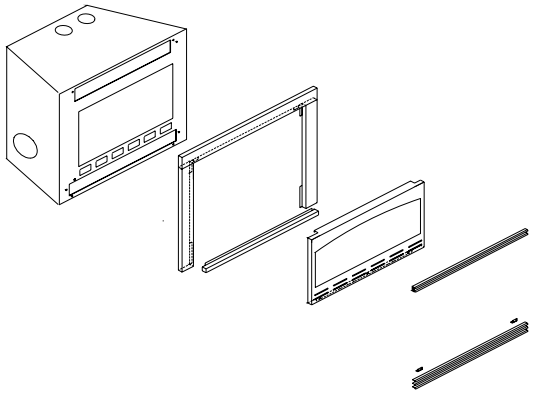


Figure 11– Face Trim Installation

Control Panel Access Door Installation

1) Place two hinges on the access door in the open position.
2) Lay the door on the fireplace with the hinge mounting holes positioned over the two mounting holes located on each side of the fireplace.
3) Secure with the four #8 self-tapping screws provided.

REMOTE CONTROL (OPTIONAL)

An Alpine Remote Control Kit (08501) may be installed on this fireplace. The remote control kit comes with a hand held transmitter, and a receiver. The remote control is thermostatically controlled so you can set the fireplace to the desired room temperature, and have that temperature maintained. The remote control is battery powered and will require periodic maintenance to keep the system working properly.

Millivolt Lead Table

The millivolt system has limitations on the distance it can be installed from the fireplace. The greater the distance from the fireplace, the larger the wire size must be to prevent loss of the millivoltage. See the table below for recommendations.

Maximum Length	Wire Guage
9’	22 ga.
13’	20 ga.
20’	18 ga.
30’	16 ga.
50’	14 ga.

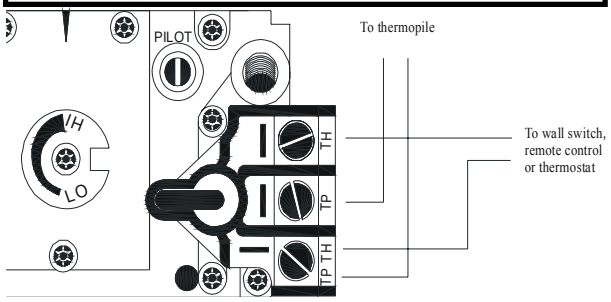


Figure 12 – Gas Valve Connections

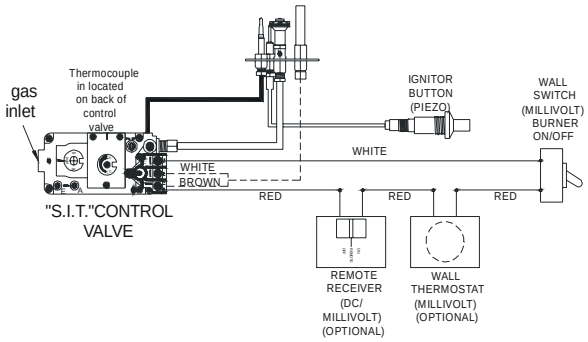


Fig. 13– Millivolt Schematic Wiring

1. Choose a convenient location on the wall to install the receiver unit. A standard electrical box may be used. Run wires from the fireplace valve to the desired wall location. See the millivolt lead table below for maximum wire runs.
2. Connect the wires to the gas valve (see figure 12 & 13).
3. Follow the installation instructions included with the remote control kit.

OPERATION & MAINTENANCE

OPERATING GUIDELINES

1) Make sure the on/off switch is in the off position.
2) Make sure gas supply is on, and shut off valves are open.
3) Push in gas control knob slightly and turn clockwise to the “off” position.
4) Remove glass for initial startup.
5) Wait five minutes for any gas which may be present in the combustion area to escape. If you then smell gas stop the lighting procedure and refer to the cover page of this manual for instructions on what to do if you smell gas. If you don’t smell gas then go to the next step.
6) Turn gas control knob counter clockwise to the “pilot” position.

Note: There may be air in the gas line that needs to be purged out when first lighting the appliance.

7) Depress gas control knob completely and hold. Push in red igniter button just to the left of the valve until an audible click is heard. This creates the spark to light the pilot. The igniter may need to be pushed several times before the pilot lights. Once the pilot is lit, continue to hold the control knob in for 60 seconds. Release the knob and it should pop back out to it’s original position. The pilot should remain lit. If pilot goes out repeat steps 3 through 7.
8) If the glass has been removed for initial start up of the appliance, it must be replaced before igniting the main burner.

Note: If the pilot will not stay lit after several tries, turn the gas control knob to the “off” position and call your Alpine dealer, your gas supplier, or another qualified service technician.

9) Turn the gas control knob counter clockwise to the “on” position.

Note: On cold start up of the fireplace the pilot should be allowed to run for at least five minutes to start a draw, and to allow the thermopile time to heat up before turning the fireplace on.

10) Place the “on/off” switch in the “on” position (the fireplace should light immediately).
11) Flame height may be varied by the HI-LO knob on the gas valve. Turning the knob counter clockwise will increase the flame height and turning it clockwise will decrease the flame height.
12) The fan control switch will vary the speed of the fan or turn the fan off. The fan is also turned on and off by a thermally activated switch built into the firebox. This will prevent the fan from blowing cold air into the home. There are many flame height and fan speed variations which may be adjusted to meet an individual comfort level.

13) In the event of a power outage, your Alpine fireplace my still be used as a source of radiant heat. However, the fireplace is most effective and efficient with the fan running.
14) To turn the fireplace off , simply pull down the control panel access door and turn the on/off switch to the off position. The fan will turn itself off after the fireplace has sufficiently cooled down. It is not necessary to turn the fan control switch off.
15) For complete shut down of the appliance, including the pilot, simply depress the control knob on the gas valve, and rotate clockwise to the "off" position.

SERVICE INFORMATION

Fireplace Maintenance

1) Before performing any service on the appliance, ensure the gas has been completely shut off, the unit cooled, and the electricity shut off to the appliance.
2) The burner and valve control compartments must be cleaned annually. A vacuum with a brush attachment works well. The logs should be cleaned gently with a soft bristle brush. The logs are fragile and are easily damaged.
3) Clean the appliance with a damp cloth. Never use abrasive cleaners. The glass should be cleaned with a gas fireplace glass cleaner. The glass will slowly build a thin white film on the inside. This film is normal and can be removed using a fireplace glass cleaner available at your local dealer.

CAUTION: DO NOT USE OVEN CLEANER TO CLEAN THE GLASS

Note: It is also highly recommended to apply the glass cleaner to the inside of the glass before the first burn.

Note: Every time the appliance is started, while cold, condensation will occur on the inside of the glass panel. This condensation will clear as the appliance heats up.

4) The fireplace is finished with a high temperature paint. If your fireplace needs to be repainted or touched up contact your local dealer for StoveBright Paint.

Note: During the first hours of operation there may be a slight odor omitted from the fireplace due to the curing and burning of the paints, and construction lubricants.

5) The appliance and the venting system must be inspected before use, and at least annually, by a qualified field technician. The vent must be inspected to ensure that the flow of combustion air and ventilation air is not obstructed.
6) Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which have been under water.
7) If the venting system is disassembled for any reason it must be properly resealed as per the instructions in the venting section of this manual. Never operate the appliance if the venting system is not properly sealed.

GOLD or NICKEL TRIMS

The gold plate or nickel trims on the fireplace require little maintenance. If the pieces get fingerprints or dust build-up, you should use a damp cloth only for cleaning. DO NOT use cleaners of any type on the gold or nickel. Be sure to clean any fingerprints off of the unit BEFORE turning the fireplace on.

REMOVING VALVE

1) Open the bottom valve door
2) Shut off the gas supply
3) Disconnect the inlet gas line (3/4" wrench)
4) Disconnect the 2 TP wires from the valve
5) Disconnect the 2 TH wires from the valve
6) Disconnect the pilot tube from the valve (use a 7/16" wrench)
7) Disconnect the thermocouple from the valve (use 9mm wrench)
8) Disconnect the main burner tube (11/16" wrench)
9) Remove the 2 square nuts securing the valve holder to the floor

Remove the valve from the appliance

INSTALLING VALVE

1) Mount valve to valve holder
2) Place valve / valve holder back into position
3) Secure valve with 2 square nuts
4) Connect main burner gas tube (use 11/16" wrench)
5) Connect the thermocouple to the valve (use a 9mm wrench)
6) Connect the pilot tube to the valve (use 7/16" wrench)
7) Connect the TH wires to the valve
8) Connect the TP wires to the valve

9) Connect the main gas supply to the valve (use a 3/4" wrench)
10) Double check to make sure all connection are complete and tight
11) Restore gas supply
12) Using a soap solution, check for leaks in main gas supply.
13) Make sure the toggle switch is in the "OFF" Position
14) Ignite pilot and check for leaks in pilot line
15) Ignite main burner and check for leaks in main burner tube.

CAUTION: Never use an open flame to check for gas leaks. Always use a soap solution to check for leaks.

GLASS GASKET

If the glass gasket needs to be replaced, use a 3/8" tadpole gasket. contact your local dealer for the correct replacement part. Never attempt to use any gasket, other than the correct replacement on the glass. Use part # 07840.

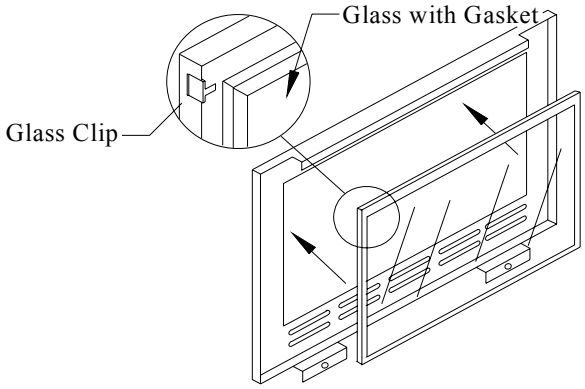
GLASS PANEL

WARNING: Do not slam the door or strike the ceramic panel with a heavy or hard object. Breakage of the panel will result.
WARNING: Do not operate the appliance with the glass front removed, cracked, or broken. Replacement of the glass panel should be done by a qualified service technician.

Your fireplace is supplied with a pane of high temperature 5mm neoceram glass panel that is capable of withstanding the highest heat that your fireplace can produce. Never attempt to use another type of glass or other material. If your glass requires cleaning, you should obtain an approved fireplace glass cleaner available at your fireplace dealer. Do not use abrasive cleaners to clean the glass panel. **DO NOT CLEAN THE GLASS WHEN IT IS HOT!**
In the event that you break your glass by impact, purchase your replacement from an authorized Alpine dealer. See the replacement parts list for ordering information. Follow the replacement steps below.

Replacing the Glass

1) Remove the door by releasing the glass clip springs found in the valve chamber area.
2) Always where gloves to protect yourself from sharp edges.
3) Remove all loose or damaged glass from the frame.
4) Insert the new glass panel with the gasket preinstalled
5) Use the 6 existing Tinnerman glass clips to hold the glass in place.
6) It is imperative that the glass be spaced in the frame so that it is lightly resting within the door frame.



THERMOPILE / THERMOCOUPLE

1) Remove the glass door
2) Open the bottom valve chamber
3) Double check to make sure gas supply is turned off
4) Disconnect the thermocouple by loosening nut from the valve with a 9mm wrench. Disconnect the thermopile by loosening 2 screws marked TP on the valve.
5) Remove the two 1/4" screws holding the pilot assembly in its bracket. Gently lift the pilot assembly up 2".
6) Disconnect the thermopile and thermocouple with a 7/16" wrench.
7) Replace the thermocouple or thermopile.
8) Reinstall in reverse order.

LOG REPLACEMENT

The fireplace must never be operated if the logs are broken or damaged. To replace the logs follow the steps below.
1) Turn off the gas supply and allow the fireplace to cool completely before servicing.
2) Open the glass door panel.
3) Gently remove the logs from the firebox. Be sure to note their position.
4) Obtain the proper replacement for the broken log.
5) Replace the log set and close the door panel.

NOTE: It is critical that the logs are placed in the proper locations. Improper positioning of logs may create carbon build-up and will severely alter the unit's performance. Poor appliance performance caused by improper log installation is not covered under warranty.

INSPECTING THE PILOT / BURNER

Periodic inspection of the pilot and main burner is required. Figure 15, located on page 11 of this manual, illustrates proper flame characteristics for the main burner. See figure 19 below for proper pilot flame characteristics.

NORMAL OPERATING SOUNDS OF

It is possible that you will hear sounds during the operation of your gas fireplace insert. These sounds are perfectly normal and should not be considered defects in your appliance.

Blower:
Alpine uses a State of the Art blower to push the heated air throughout your home. It is not unusual for the fan to make a rushing air sound when it is on. This sound will increase and decrease in volume depending on the speed of setting of your blower controller.

Metal Firebox:
The firebox is made of a high quality steel. Steel, by its very nature, expands and contracts as it heats and cools. You will often hear a “ticking” or “clicking” sounds as the appliance heats and cools. Again, this is normal for steel fireboxes.

Pilot Flame:
While the pilot flame is on it can make a slight hissing sound. This is also normal

Gas Control Valve:
As the gas control turns ON and OFF, a click sound may be audible. This is the normal operating sound of a gas valve.

CLEARANCE REQUIREMENTS

Clearances to Combustibles Unless Specified (Fig. 14)

Sides	A	10”
Ceiling	B	48”
Mantel Clearance	C	See Figure 15 & 16
Mantle Depth	D	See Figure 15 & 16
Hearth Height	E	0”
Hearth Depth	F	16”
Minimum Hearth Width	G	48”

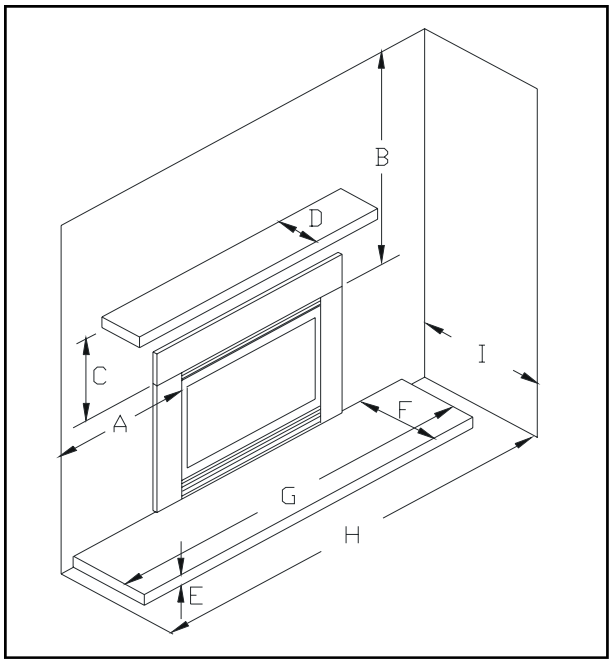


Fig. 14 - Insert Clearances

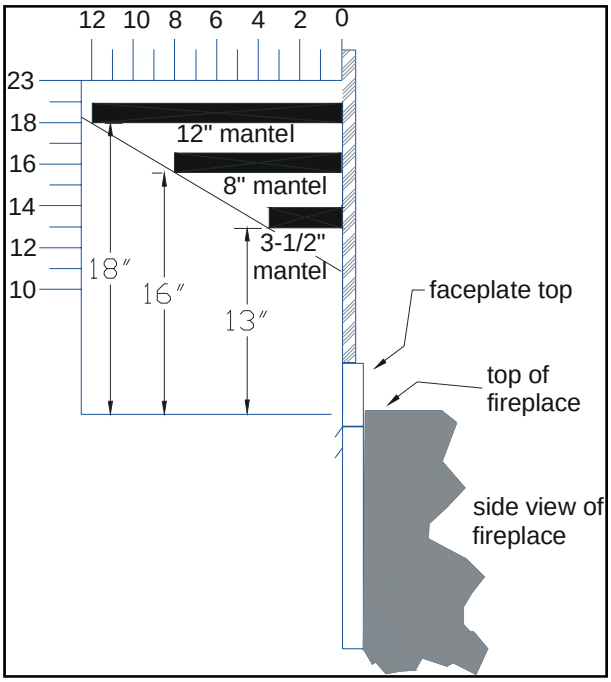


Fig. 15 - Mantel Clearance

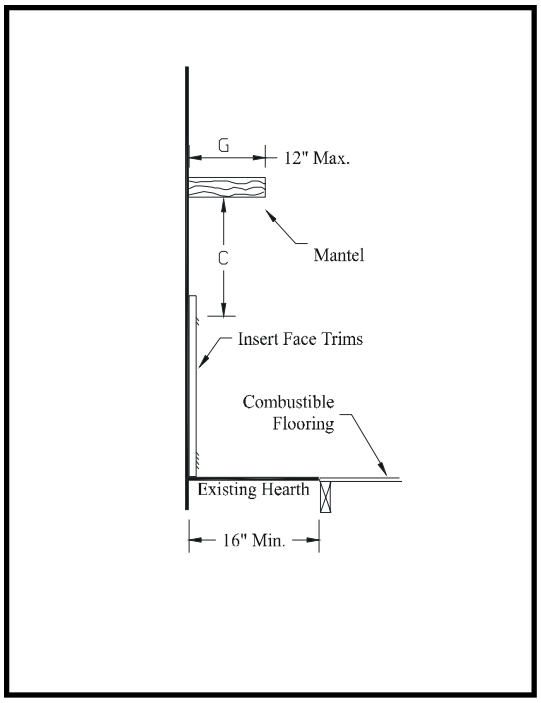


Fig. 16 - Hearth Clearances

FOR YOUR SAFETY READ BEFORE LIGHTING

This appliance must be installed in accordance with local codes, if any; If not, follow the current ANSI Z223.1

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life. Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or gas supplier.

A) This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.

B) BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- **Do not try to light any appliance**
- **Do not touch any electrical switch, do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbors phone. Follow the gas suppliers instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

C) Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D) Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

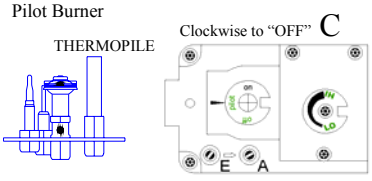
This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

CAUTION: Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away. Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

LIGHTING INSTRUCTIONS

STOP! Read the safety information above on this label.

1) **Push in gas control knob slightly and turn clockwise C to "OFF". Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.**
2) **Wait five (5) minutes to clear out any gas. If you then smell gas STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.**
3) **Turn knob on the gas control**



4) **Push in control knob all the way and hold in. Continually push and release the red button on the spark ignitor until pilot lights. Continue to hold the control knob in for about 1/2 minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 1 to 4. If knob does not pop up when released, stop and immediately call your service technician or gas supplier. If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.**
5) **Turn gas control knob counterclockwise D to "ON"**
6) **Use the toggle switch to operate main burner.**

TO TURN OFF GAS APPLIANCE

1) **Push in the gas control knob slightly and turn clockwise C to "OFF". Do not force.**
2) **Turn off all electric power to the appliance if service is to be performed.**

DO NOT REMOVE THIS INSTRUCTION PLATE DVI-700-1

NOTE: Before troubleshooting the gas control system, be sure the external gas shut off is in the "ON" position.

WARNING: TO PREVENT INJURY OR PROPERTY DAMAGE, *REMOVE THE GLASS PANEL FROM THE APPLIANCE BEFORE DOING ANY WORK ON THE GAS CONTROL SYSTEM*. FAILURE TO DO SO COULD RESULT IN GAS BUILD-UP AND EXPLOSION.

GAS SYSTEM TROUBLESHOOTING

PROBLEM	POTENTIAL CAUSES	CORRECTIVE ACTION
Spark igniter will not light pilot.	Piezo wire loose Defective Piezo ignitor Piezo wire grounding out Electrode is grounding out Electrode is sparking at wrong location	• Check for spark at electrode and pilot. If no spark, disconnect wire at electrode, put wire to ground, and try igniter again. If still no spark follow the Piezo wire to Piezo igniter to see where grounding may be occurring. • Position electrode into pilot so gas may be able to contact spark
Pilot will not stay lit after carefully following lighting instructions	Defective thermopile Defective thermocouple Thermopile / thermocouple grounding out. Loose thermopile leads TP-THTP on valve Defective automatic gas valve	• Check pilot flame, must impinge on thermopile and thermocouple • Clean and/or adjust pilot so pilot is enveloped around thermopile and thermocouple. • Be sure wire connections at gas valve terminals are tight and thermopile and thermocouple are fully inserted into pilot bracket • Check switch wires to make sure they are not grounding • Check thermopile with millivolt meter. Take reading at thermopile terminals of valve TP-TPTH. Should read 325 millivolts (circuit open) minimum while thermopile has pilot flame on it. • With the pilot ignited, turn valve knob to on. Take reading at TP-TPTH with on/off switch in on position. Reading should be 100mv or greater. If reading is OK and pilot does not hold,
Pilot burning, no gas to burner. Valve knob is on Wall switch is on	Valve wire connections are loose Valve wires are defective	• Check two way switch / wall switch for proper connections. Jumper wire across terminals at wall switch. If burner comes on, replace switch. • If okay, jumper wire at valve (TH-THTP). If unit turns on, replace wires or check for loose connections
Frequent pilot outage problems	Pilot flame may be too low or blowing high causing the pilot safety to drop out Wall switch wires may be grounding out. Thermopile or thermocouple may be grounding out.	• Clean and adjust pilot for maximum flame impingement on thermopile and thermocouple. • Trace wires from valve to wall switch for possible damage or grounding against appliance or gas supply. • Trace thermopile wires from valve to thermopile for possible grounding against the appliance or gas valve. • Follow same steps for thermocouple

Caution: Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance

GAS PARTS

SIT Control Valve	04036
Flexible Gas Line Connector	04048
Burner Supply Line w/ Fittings	05114

Burner Orifice

STi 270NG 04054	STi 270LP 04099
STi 310NG 05112	STi 310LP 04102
STi 360NG 05113	STi 360LP 05111
Pilot Assembly	04038
Thermocouple	04040
Thermopile	04041
Propane Pilot Orifice	05082

Burner

STi 270	03200
STi 310	03201
STi 360	03202

Electrical Parts

Fan	08218
KB Switch	09232
Thermal Fan Switch	08222
Piezo Ignitor Button	04046
Thermostat (Wall Mount)	08260
Wall Switch	08255
Wire (Wall Switch/Thermostat)	08255

Face Trim, Logs, Fan Accessories

Glass - STi 270	06182
STi 310	06138
STi 360	06184
Glass Gasket	07840
Face Trim Frame (3 Pieces)	
Brass Knob W/Screw	04032

Face Pieces

	STi 270	STi 310	STi 360
Top	32130	33130	34130
Left	32135	33135	34135
Right	32140	33140	34140
B.F.	32145	33145	34145

Doors

	STi 270	STi 310	STi 360
Valve	32065	33065	34065
Vent	32820	33820	34820

Logs

STi 270	07631
STi 310	07632
STi 360	07632

Fasteners

Self Tapping Screws-#8	08510
Self Tapping Screws-#10	08515
Hardware Package	08600
Door Hooks	04081
Door Springs	04082
Tinnerman Clips	05149
Door Hinges	06095
Bullet Catches	04079

Venting Components

Appliance Adaptor	29700

Gaskets

Pilot Assembly Gasket	05100
Burner Supply Line Gasket	05105
Thermal Fan Switch Gasket	05101
Appliance Adapter Gasket	29701

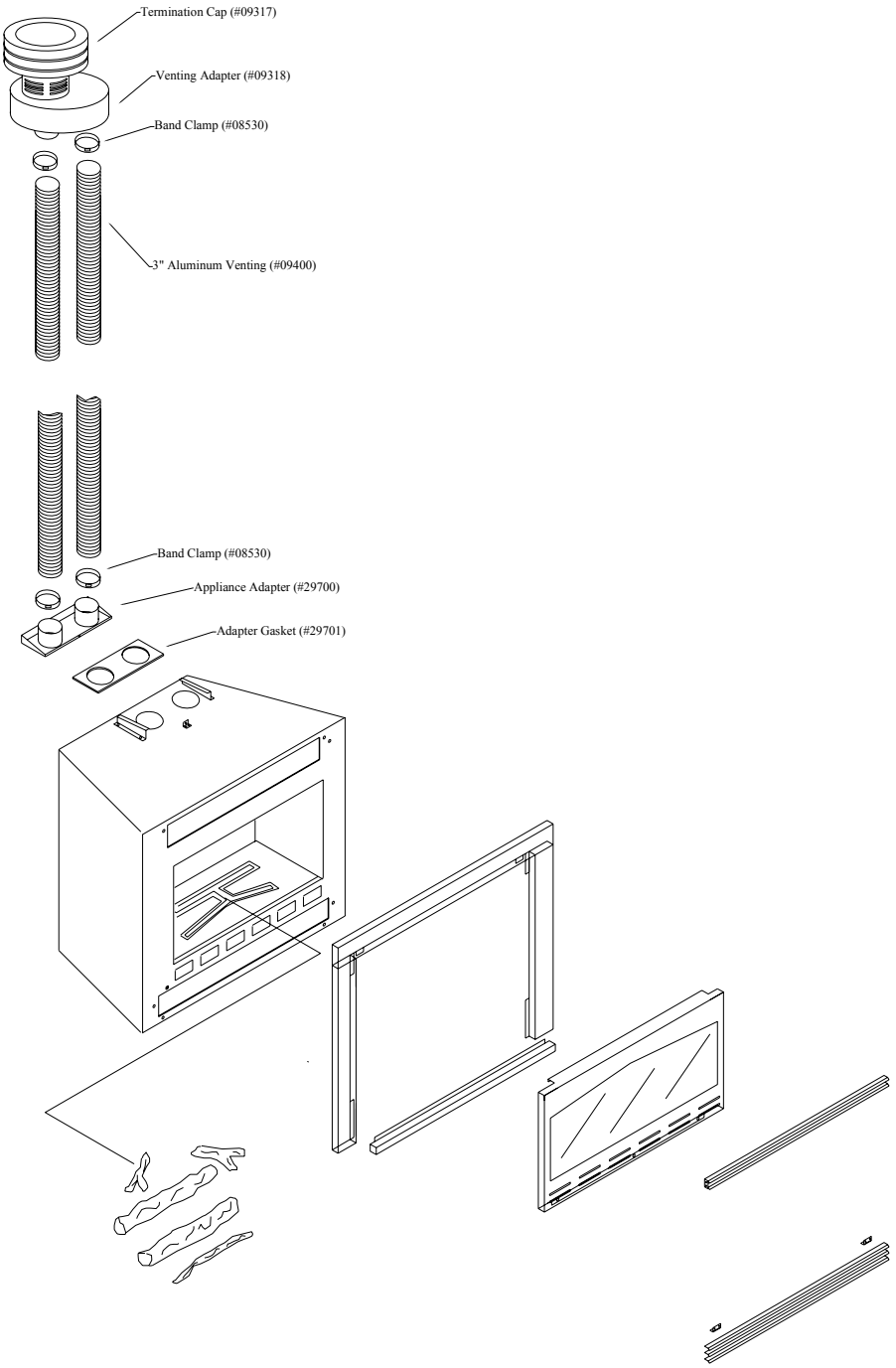
For current prices and policies covering replacement parts, contact the factory or your Alpine distributor or dealer. Parts will be supplied at current prices. To order parts, you must have the following information:

1. The model number of the appliance.
2. The part number.
3. A description of the part.
4. The purchase date of the appliance.

If you have any questions or problems, contact your local distributor/dealer or:

Alpine Gas Fireplaces
782 West State Street
Lehi, Utah 84043
(801) 768-8411

EXPLODED VIEW



LIMITED LIFETIME WARRANTY

COVERAGE - This Limited Warrranty is issued by Alpine Gas Fireplaces, a division of Alpine Supply Company ("Alpine"), and extends only to the original consumer purchaser. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

LIMITED ONE YEAR WARRANTY

The Alpine Gas Fireplace is warranted to be free of defects in materials and workmanship (does not include installation materials and installation labor) for a period of one (1) year from the date of purchase when installed and used in accordance with the recommendations in the installation and operation instructions for the fireplace. The determination as to the existence of a defect and whether or not that defect is material shall be made in accordance with accepted industry standards. Defective parts will be repaired or replaced at Alpine's option. Parts which are returned to Alpine and found defective on inspection will be repaired, or replaced with a new part, without charge to the purchaser as long as the part is still under warranty. All shipping charges will be paid by the purchaser, and all new or repaired parts shipped to the purchaser shall be shipped freight collect (F.O.B. Lehi, Utah). Service calls ordered by the customer, repairs, or parts which do not qualify for warranty shall be charged to the customer at then current rates for labor, parts and transportation.

LIMITED LIFETIME WARRANTY

In addition to the one year warranty described above, the firebox of the Alpine Gas Fireplace is warranted for life against through wall perforation when installed and used in strict compliance with the recommendations in the installation and operation instructions for the fireplace, provided that the blower has been installed and been kept operable and working whenever the fireplace has been in use, and there has been an approved and tested vent cap in place on the chimney to prevent moisture from coming down the flue and causing the rusting of the firebox or other components. For purposes of this lifetime warranty, burnout means only the eroding of the interior metal floor, top, walls or heat exchanger in the top of the appliance, solely by fire action, to the point that the erosion has resulted in one or more holes from inside of the firebox into the surrounding hot air chambers of the appliance. This lifetime warranty does not cover warping or rusting of the firebox. The damaged part or parts of the firebox will be repaired or replaced at Alpine's option. Parts which are returned to Alpine and are found damaged by burnout on inspection will be repaired, or replaced with a new part, without charge to the purchaser as long as the unit is still under warranty. All shipping charges shall be paid by the purchaser, and all new or repaired parts shipped to the customer shall be shipped freight collect (F.O.B. Lehi, Utah). If the damaged part or parts under warranty cannot reasonably be removed and shipped to Alpine for replacement or repair, Alpine will provide a serviceman to correct the defect at the location where the gas fireplace is installed without charge to the purchaser for labor or materials, provided that the purchaser shall pay a reasonable charge for the transportation of the serviceman and needed parts and equipment from the nearest Alpine service center to the location of the appliance and return.

LIMITATIONS - These one year and limited lifetime warranties are in lieu of all other express warranties. ALL IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE, ARE SPECIFICALLY LIMITED TO A TERM OF ONE (1) YEAR FROM THE DATE OF PURCHASE (SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU). Alpine neither assumes nor authorizes any other person to assume for it, any additional liability in connection with the sale, installation, replacement, or repair of the appliance.

EXCLUSIONS Alpine shall be held free and harmless from liability damage to property or injury to persons related to the installation or operation, proper or improper, of the appliance. THESE ONE YEAR AND LIMITED LIFETIME WARRANTIES DO NOT COVER, NOR DOES ALPINE ASSUME, RESPONSIBILITY FOR INCIDENTAL, SECONDARY, OR CONSEQUENTIAL DAMAGES. (SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.)

These one year and limited lifetime warranties do not cover:

1. Damage or malfunction resulting from accident, negligence, abuse, alteration, unauthorized service, damage during transportation, shipping or damage caused by external fire, floods, acts of God, or any other casualty.

2. Damage or malfunction resulting from failure to follow the installation or operating instructions provided with the fireplace unit.

3. Damages or defects in any parts, equipment, accessories, materials, or items not manufactured, sold, or supplied by Alpine, or any damage resulting from the use of such items, which are used on or in connection with the fireplace unit.

4. Damage to or defects in any glass windows or internal or external finishes, or any damage resulting there from, except as an examination by the purchaser may reveal at the time of delivery of the appliance and is reported immediately to Alpine.

5. Any expansion and contraction noises commonly found in heating equipment.

6. Damage or malfunction caused by trees or bushes located in the proximity of the vent or vent termination.

PROCEDURE TO OBTAIN PERFORMANCE UNDER WARRANTY It is recommended that you first contact your local dealer as the dealer may be able to assist you with warranty or other service work. In any case, the following procedure must be followed for any and all warranty work;

If damage occurs or a defect is discovered which you believe is covered by this limited warranty, you must promptly notify Alpine of the damage or defect in writing and provide reasonably satisfactory proof of the date of purchase of the appliance. All claims made by you under this warranty should be directed to Alpine at the address below. The written notice must contain the name, address and phone number of the customer, as well as the name of the dealer, the serial number of the appliance and the date purchased. Failure to give timely notice to Alpine of any material damage or defect will result in that damage or defect being excluded from coverage.

Upon receipt Alpine will, within 60 days, repair, replace or service the parts or unit as covered by this Limited Warranty. Exceptions to this may be delays that are caused by acts of God, labor problems or material shortages.

ALPINE GAS FIREPLACES **(801)768-8411**
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